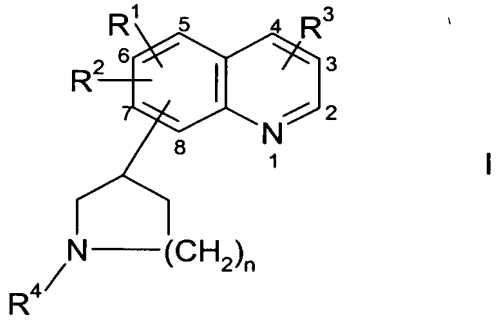
CLAIMS

1. A quinoline compound with a non-quinoline ring attached thereto of the Formula



I

or a pharmaceutically salt thereof;

wherein R^1, R^2 and R^3 are independently selected from hydrogen, halo, $(C_1\text{-}C_6)$alkyl optionally substituted with from one to three halo atoms; and $(C_1\text{-}C_6)$alkoxy optionally substituted with from one to three halo atoms;

R^4 is hydrogen or $(C_1\text{-}C_3)$ alkyl; and

n is one or two.

2. A compound according to Claim 1 wherein either R^1 and R^2 are both hydrogen or one of R^1 and R^2 is hydrogen and the other is attached at position 5.

3. A compound according to Claim 1 wherein n is 1 and either R^1 and R^2 are both hydrogen or one of R^1 and R^2 is hydrogen and the other is attached at position 5, and the non-quinoline ring is attached at position 7.

4. A compound according to Claim 1, which is selected from:

R and S - (3-Ethyl-7-methyl-8-piperidin-3-yl-quinoline);

R, S - (3-Ethyl-7-methyl-8-piperidin-3-yl-quinoline);

R and S - (3,6-Dimethyl-8-piperidin-3-yl-quinoline);

R, S - (3,6-Dimethyl-8-piperidin-3-yl-quinoline);

R and S - (3,7-Dimethyl-8-piperidin-3-yl-quinoline);

R, S - (3,7-Dimethyl-8-piperidin-3-yl-quinoline);

R and S - (3,5-Dimethyl-8-piperidin-3-yl-quinoline);

R,S - (3,5-Dimethyl-8-piperidin-3-yl-quinoline);

R and S - (6-Chloro-3-methyl-8-piperidin-3-yl-quinoline);

R, S - (6-Chloro-3-methyl-8-piperidin-3-yl-quinoline);

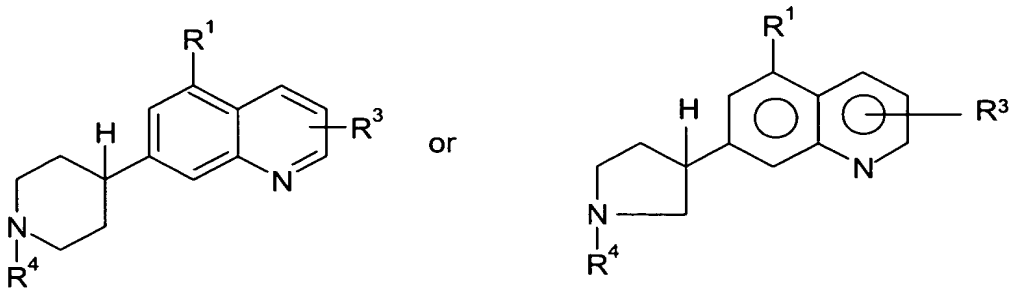
R and S - (4-Methyl-8-piperidin-3-yl-quinoline);

R, S - (4-Methyl-8-piperidin-3-yl-quinoline);

R and S - (3-Methyl-8-piperidin-3-yl-quinoline);

R, S - (3-Methyl-8-piperidin-3-yl-quinoline);
R and S - (3-Ethyl-8-piperidin-3-yl-quinoline);
R, S - (3-Ethyl-8-piperidin-3-yl-quinoline);
R and S - (Ethyl-7-piperidin-3-yl-quinoline);
R, S - (Ethyl-7-piperidin-3-yl-quinoline);
R and S - [3-Methyl-8-(1-methyl-piperidin-3-yl)-quinoline]; and
R, S - [3-Methyl-8-(1-methyl-piperidin-3-yl)-quinoline];
3-Ethyl-7-methyl-8-(1-methyl-piperidin-3-yl)-quinoline;
3-Ethyl-8-methyl-8-(1-ethyl-piperidin-3-yl)-7-methyl-quinoline;
3,6-Dimethyl-8-(1-methyl-piperidin-3-yl)-quinoline;
8-(1-Ethyl-piperidin-3-yl)-3,6-dimethyl-quinoline;
3,7-Dimethyl-8-(1-methyl-piperidin-3-yl)-quinoline;
8-(1-Ethyl-piperidin-3-yl)-3,7-dimethyl-quinoline;
3,5-Dimethyl-8-(1-methyl-piperidin-3-yl)-quinoline;
8-(1-Ethyl-7-piperidin-3-yl)-3,5-dimethyl-quinoline;
6-Chloro-3-methyl-8-(1-methyl-piperidin-3-yl)-quinoline;
6-Chloro-8-(1-ethyl-piperidin-3-yl)-3-methyl-quinoline;
3-Ethyl-8-(1-methyl-piperidin-3-yl)-quinoline;
3-Ethyl-8-(1-ethyl-piperidin-3-yl)-quinoline;
4-Methyl-8-(1-methyl-piperidin-3-yl)-quinoline;
8-(1-Ethyl-piperidin-3-yl)-4-methyl-quinoline;
3-Methyl-8-(1-methyl-piperidin-3-yl)-quinoline;
8-(1-Ethyl-piperidin-3-yl)-3-methyl-quinoline;
3-Ethyl-8-(1-methyl-pyrrolidin-3-yl)-quinoline;
3-Ethyl-8-(1-ethyl-pyrrolidin-3-yl)-quinoline;
3-Ethyl-7-(1-methyl-piperidin-3-yl)-quinoline;
3-Ethyl-7-(1-ethyl-piperidin-3-yl)-quinoline;
3-Ethyl-7-pyrrolidin-3-yl)-quinoline;
3-Ethyl-7-(1-methyl-pyrrolidin-3-yl)-quinoline;
3-Ethyl-7-(1-ethyl-pyrrolidin-3-yl)-quinoline;
3-Ethyl-7-pyrrolidin-3-yl)-quinoline;
3-Ethyl-7-(1-methyl-pyrrolidin-3-yl)-quinoline; and
3-Ethyl-7-(1-ethyl-pyrrolidin-3-yl)-quinoline;
and pharmaceutically acceptable salts thereof.

5. A compound according to Claim 1, having the Formula:



wherein R^1 and R^3 are independently selected from hydrogen, halo, $(C_1\text{-}C_6)$alkyl optionally substituted with from one to three halo atoms; and $(C_1\text{-}C_6)$alkoxy optionally substituted with from one to three halo atoms; and

R^4 is hydrogen or $(C_1\text{-}C_3)$ alkyl.

6. A pharmaceutical composition comprising a therapeutically effective amount of a compound according to Claim 1, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.

7. A method for treating a disorder or condition that can be treated by modulating serotonergic neurotransmission in a mammal, comprising administering to a mammal requiring such treatment a serotonin 7 receptor agonizing effective amount of a compound according to Claim 1 or a pharmaceutically acceptable salt thereof.

8. A pharmaceutical composition for treating a condition or disorder that can be treated by modulating serotonergic neurotransmission in a mammal, comprising:

a) a pharmaceutically acceptable carrier;

b) an amount of a first compound according to Claim 1 or a pharmaceutically acceptable salt thereof; and

c) an amount of a second compound selected from the group consisting of a 5HT reuptake inhibitor, a 5HT7 receptor antagonist or a NK1 receptor antagonist or a pharmaceutically acceptable salt thereof;

wherein the amounts of (b) and (c) are together effective in treating such disorder or condition.

9. A method for treating a disorder or condition that can be treated by modulating serotonergic neurotransmission in a mammal, comprising administering to a mammal requiring such treatment:

a) an amount of a compound according to Claim 1 a pharmaceutically acceptable salt thereof; and

b) an amount of a second compound selected from the group consisting of 5HT reuptake inhibitor, a 5HT7 receptor antagonist and an NK1 receptor antagonist or pharmaceutically acceptable salt thereof;

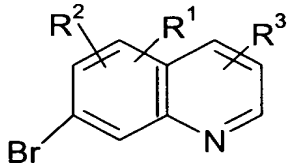
wherein the amounts of (a) and (b) are together effective in treating such disorder or condition.

10. A method for treating a disorder or condition selected from depression, anxiety, avoidant personality disorder, premature ejaculation, eating disorders, migraine, premenstrual syndrome, premenstrual dysphoric disorder, seasonal affective disorder, bipolar disorder, jet lag, sleep disorder, nocturnal enuresis, and restless leg syndrome in a mammal, comprising administering to a mammal in need of such treatment an amount of a compound according to Claim 1, or a pharmaceutically acceptable salt thereof, which amount is effective in treating such disorder or condition.

11. A method for treating a disorder or condition selected from depression, anxiety, avoidant personality disorder, premature ejaculation, eating disorders, migraine, premenstrual syndrome, premenstrual dysphoric disorder, seasonal affective disorder, bipolar disorder, jet lag, sleep disorder, nocturnal enuresis, and restless leg syndrome in a mammal, comprising administering to a mammal in need of such treatment an amount of a compound according to Claim 1, or a pharmaceutically acceptable salt thereof, which amount is effective in agonizing 5HT7 receptors.

12. A method of treating a disorder or condition selected from depression, anxiety, avoidant personality disorder, premature ejaculation, eating disorders, migraine, premenstrual syndrome, premenstrual dysphoric disorder, seasonal affective disorder, bipolar disorder, jet lag, sleep disorder, nocturnal enuresis, and restless leg syndrome in a mammal, comprising administering to a mammal requiring such treatment: (a) and amount of a first compound according to Claim 1 or pharmaceutically acceptable salt thereof; and (b) an amount of a second compound selected from the group consisting of a 5HT7 receptor antagonist, a NK1 receptor antagonist and an a 5HT7 receptor antagonist or pharmaceutically acceptable salts of said second compound; wherein the amounts of (a) and (b) are together effective in treating such disorder or condition.

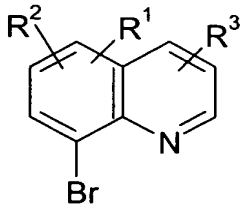
13. A compound selected from the group consisting of a compound of the Formula



XII

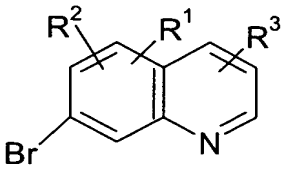
wherein R^1, R^2 and R^3 in XII are independently selected from hydrogen, halo, $(C_1\text{-}C_6)$alkyl optionally substituted with from one to three halo atoms; and $(C_1\text{-}C_6)$alkoxy optionally substituted with from one to three halo atoms,

and a compound of the formula



wherein R^1, R^2 and R^3 are independently selected from hydrogen, halo, $(C_1\text{-}C_6)$alkyl optionally substituted with from one to three halo atoms; and $(C_1\text{-}C_6)$alkoxy optionally substituted with from one to three halo atoms.

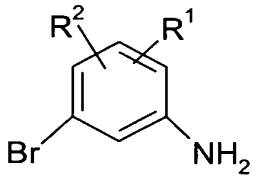
14. A method for synthesizing a compound of the Formula



XII

wherein R^1, R^2 and R^3 are independently selected from hydrogen, halo, $(C_1\text{-}C_6)$alkyl optionally substituted with from one to three halo atoms; and $(C_1\text{-}C_6)$alkoxy optionally substituted with from one to three halo atoms;

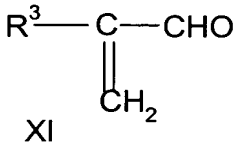
which method comprises reacting a compound of the Formula



X

wherein R^1 and R^2 are as recited above,

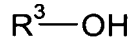
with a compound of the Formula



XI

wherein R^3 is as recited above,

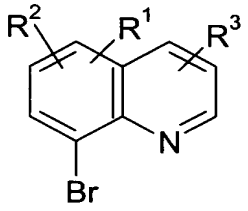
or with a compound



wherein R^3 is as recited above,

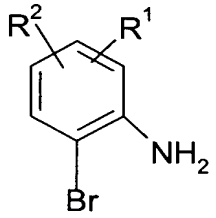
wherein said reaction is in the presence of an aqueous acid and 3-nitrobenzenesulfonic acid or a salt thereof, and wherein said reaction is at a temperature of from about 100°C to about 140°C.

15. A method for synthesizing a compound of the Formula



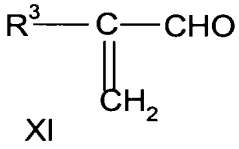
wherein R^1, R^2 and R^3 are independently selected from hydrogen, halo, $(C_1\text{-}C_6)$alkyl optionally substituted with from one to three halo atoms; and $(C_1\text{-}C_6)$alkoxy optionally substituted with from one to three halo atoms;

which method comprises reacting a compound of the Formula



wherein R^1 and R^2 are as recited above,

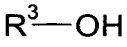
with a compound of the Formula



XI

wherein R^3 is as recited above,

or with a compound



wherein R^3 is as recited above,

wherein said reaction is in the presence of an aqueous acid and 3-nitrobenzenesulfonic acid or a salt thereof, and wherein said reaction is at a temperature of from about 100°C to about 140°C.